

# **The Fort Environmental Assessment**

## **General Instructions**

It shall be the responsibility of the subdivider to submit the information required by this Section with the preliminary plat. This Environmental Assessment format shall be used by the applicant in compiling a thorough description of the potential impacts for the proposed subdivision. Each question pertinent to the proposal must be addressed in a full comprehensive and systematic fashion (both maps and text). Incomplete Environmental Assessments will not be accepted.

The Environmental Assessment will be objectively measured to assure that all mandatory elements are included and that, based upon objective standards, all prospective impacts are adequately addressed. At a minimum the Environmental Assessment must contain the following for all assessment contents:

- a. A summary of probable impacts and statement of impact for each environmental consideration topic;
- b. A discussion to support the statement of impact;
- c. Referenced sources and citations to support the statement of impact;
- d. If applicable, site specific maps and documentation to support the statement of impact discussion.

If, at any time during the application process, material information comes to light that is not addressed in the Environmental Assessment, the subdivider shall be required to amend the environmental Assessment to adequately address the issue. In this event the 60 working day review period is suspended and will not resume until the revised Environmental Assessment has been submitted, reviewed and approved by the Planning and Zoning Office. Following review and acceptance of the amended Environmental Assessment, the application process will resume at the same stage of the 60 working day review period that the original application was before the additional information came to light.

## **Environmental Assessment Contents**

There are two major sections to the Environmental Assessment. The first section incorporates the natural systems provisions of 76-3-603 and 76-3-608, MCA. The second section evaluates the impacts to the human community and incorporates 76-3-608(3)(a) criteria for public health, safety, and local services. The sources of information for each section of the Assessment shall be identified. All Environmental Assessments shall contain the signature, date of signature and mailing address of the owner of the property and the person, or persons, preparing the report and citation and a copy of all supporting information. . (Note: Any response to any section not specifically sourced in this report is attributed to the Author of the report.)

## Section 1 – Resource Assessment and Impact Criteria Report

### a. Surface Water:

- i. Locate on the preliminary plat all surface water and the delineated 100 year floodplain(s) which may affect or be affected by the proposed subdivision including:

The proposed subdivision is located in Bigfork approximately ¼ mile east of the Little Brown Church intersection of Highway 35 and 83. None of the subject property is located within the Floodplain of the Whitefish River (FIRM Panel 2305J effective 11/4/15).

- A. All natural water systems such as perennial and intermittent streams, lakes and ponds, rivers, or marshes.

The property does not have any natural water systems and is not located adjacent to any natural water systems such as streams, lakes, ponds, rivers, or marshes.

- B. All artificial water systems such as canals, ditches, aqueducts, reservoirs, irrigation or drainage systems.

There are no artificial water systems such as, canals, ditches, reservoirs, or shared agricultural irrigation systems on the subject parcel. There no artificial water impoundments associated with the property at present. The property is not part of an irrigation district or shared irrigation facilities.

- ii. Describe all probable impacts to surface waters which may affect or be affected by the proposed subdivision including name, approximate size, present use, and time of year when water is present and proximity of proposed construction (e.g. buildings, sewer systems, and roads) to surface waters.

The Flathead River is approximately 1.5 miles to the west however the closest water body is a small pothole lake approximately 2300 feet to the southeast. It is unlikely that the development of the proposed subdivision would have any impact on the pothole lake as there is a highway in between and a lot of cow pasture.

- iii. Describe any existing or proposed stream bank or shoreline alterations or any proposed construction or modification of lake beds or stream channels. Provide information on location, extent, and purpose of alteration. If any construction or changes are proposed which require a 310 Permit from the Flathead County Conservation District the subdivider



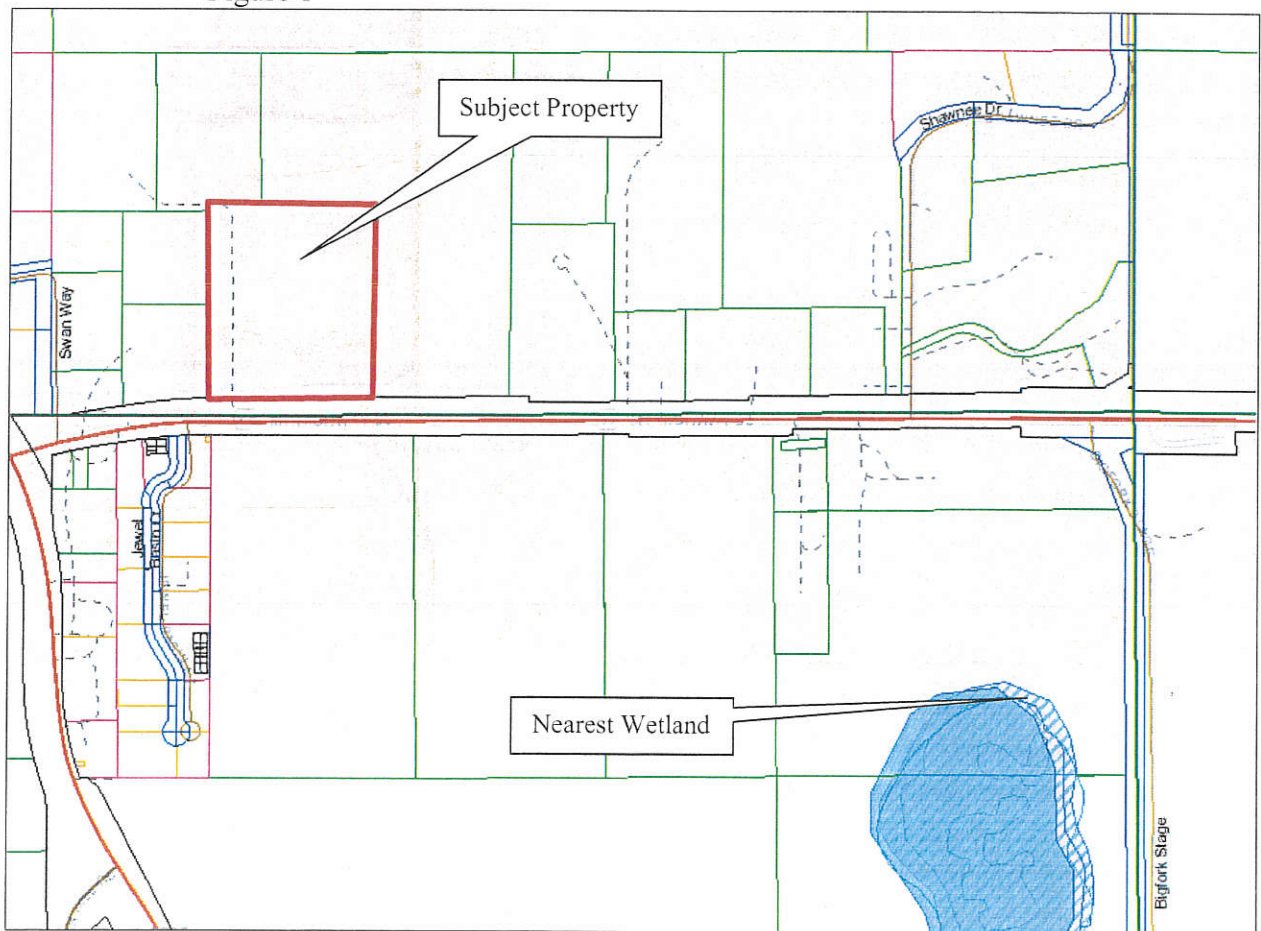
shall acknowledge that the permit is required and will be obtained prior to final plat.

As the property does not have any streams or lakes on it nor is it adjacent to any stream or lakes, the proposed subdivision will not alter any streambanks nor will it trigger a 310 permit

- iv. If wetlands are present, the subdivider shall provide a map showing wetland areas. A wetlands investigation completed by a qualified consultant, using the most current U.S. Army Corps of Engineers' Wetlands Delineation Manual may be required. If any construction or changes are proposed which require a 404 Permit, the subdivider shall acknowledge that the permit is required and will be obtained.

There are no wetlands located on the property. Wetlands are indicated with the blue hatching in Figure 1

Figure 1



Source: Flathead County GIS – Wetland Layer

- b. Ground Water:

- i. Establish the seasonal minimum and maximum depth to water table, dates on which these depths were determined, and the location and depth of all known aquifers which may be affected by the proposed subdivision. Monitoring may be waived if evidence of minimum and maximum groundwater elevations can be documented.

In looking at nearby septic permits (02-00866-R Little Brown Church and 16-07494N 257 Hwy 83) the groundwater depths were stated as being greater than 84 inches. As the proposed subdivision in connecting to the Bigfork Sewer and Water system, groundwater monitoring is not a factor for wastewater.

- ii. If determined from subsection (b)(i) above that any area within the proposed subdivision is within eight feet of the surface, the high water table shall be measured from tests taken during the period of the highest groundwater elevations, generally from March 15 through June 30, during average precipitation years and reported in the environmental assessment.

As stated above, nearby septic permits indicate groundwater depths greater than 84 inches (seven feet). However groundwater monitoring would only be applicable if the applicant was proposing on-site wastewater disposal. In this case the applicant will be connect to the Bigfork Public Wastewater System for transport and treatment.

- iii. Describe any steps necessary to avoid probable impacts and the degradation of ground water and ground water recharge areas as a result of the subdivision.

The proposed subdivision is not located within a groundwater recharge area. As the subdivision will connect to the Bigfork Public Wastewater Collection System and the effluent treated by said Treatment Facility, waste water will not be exposed to groundwater nor have any impact to groundwater. Any of the probable impacts to groundwater quality are associated with the stormwater drainage system.

The stormwater management system is designed to retain most of the storm water runoff from the 100-year 24-hour storm event, with offsite runoff not exceeding predevelopment conditions. The overall drainage system will be developed in conformance to MT DEQ standards and will utilize small local drainage ditches along the proposed eastern subdivision road. (See Sheets 1-9 of the DEQ Lot Layout by Larsen Engineering).

c. Geology/Soils:

- i. Locate on the preliminary plat any known geologic hazards affecting the subdivision which could result in property damage or personal injury due



to rock falls or slides, mud, snow; surface subsidence (e.g., settling or sinking); and seismic activity.

The proposed development is located in an area of almost flat vacant ground. There is only four feet of vertical relief on the 10 acre site. (See attached Preliminary Plat with Topographic survey information prepared by Sands Surveying, Inc.)

There is no danger of rock slides, mud slides, or avalanche on the property. The property is not located on a geologic fault line.

- ii. Explain what measures will be taken to prevent or materially lessen the danger and probable impacts of future property damage or personal injury due to any of the hazards referred to above.

No hazards were identified above and therefore no mitigation measures are proposed to address the hazards.

- iii. Explain any unusual soil, topographic or geologic conditions on the property which limit the capability for building or excavation using ordinary and reasonable construction techniques. The explanation should address conditions such as shallow bedrock, high water table, unstable or expansive soil conditions, and slope. On the preliminary plat identify any slopes in excess of 40 percent.

The proposed subdivision is currently undeveloped. The proposed subdivision is located near the Swan Junction commercial hub and the Jewel Basin Court with numerous multifamily buildings. There does not appear to be and topographic or geologic conditions that would pose risk or cost to typical construction techniques. There are county roads, sewer and water mains running adjacent to the subject property.

The property is mapped by the 1960 Upper Flathead Valley Soils Survey and it identifies three soil types: Blanchard loamy fine sand, 3 to 7% slope percent slopes (Bo) a Class IVes-1 soil; Flathead Fine sandy loam, 3 to 7% (Fb) a Class IIes-1 soil and Haskill fine sand, 7 to 12% (Hm) a Class VIes-1 soil. (See Figure 3 in Section g) Soils are classified as Fb (Flathead fine sandy loam, 3 to 7 percent) for the majority of property. A small portion of the property is classified as Hm (Haskill fine sand, 7 to 12 percent slopes). Depth to water table is estimated to be more than 80 inches for both soil types. These soils are suitable for development using conventional construction techniques. (See attached Preliminary Plat).

- iv. Identify any soils constraints, including probable impacts due to expansive soils, hydric soils, or any soils which limit sanitary facilities. Explain

special design considerations and methods needed to overcome the soil limitations.

The soils within the project are not limited for development of structure according to SCS ratings. No hydric soils are present due to lack of wetland areas. Public sewage collection will be utilized for the project. No onsite facilities that dispose of sanitary sewage into the ground are proposed; soil constraints relating to sanitary facilities do not apply.

- v. Describe the location and amount of any cut or fill three or more feet in depth. These cuts and fills should be indicated on a plat overlay or sketch map. Where cuts or fills are necessary, describe any plans to prevent erosion and to promote re-vegetation such as replacement of topsoil and grading.

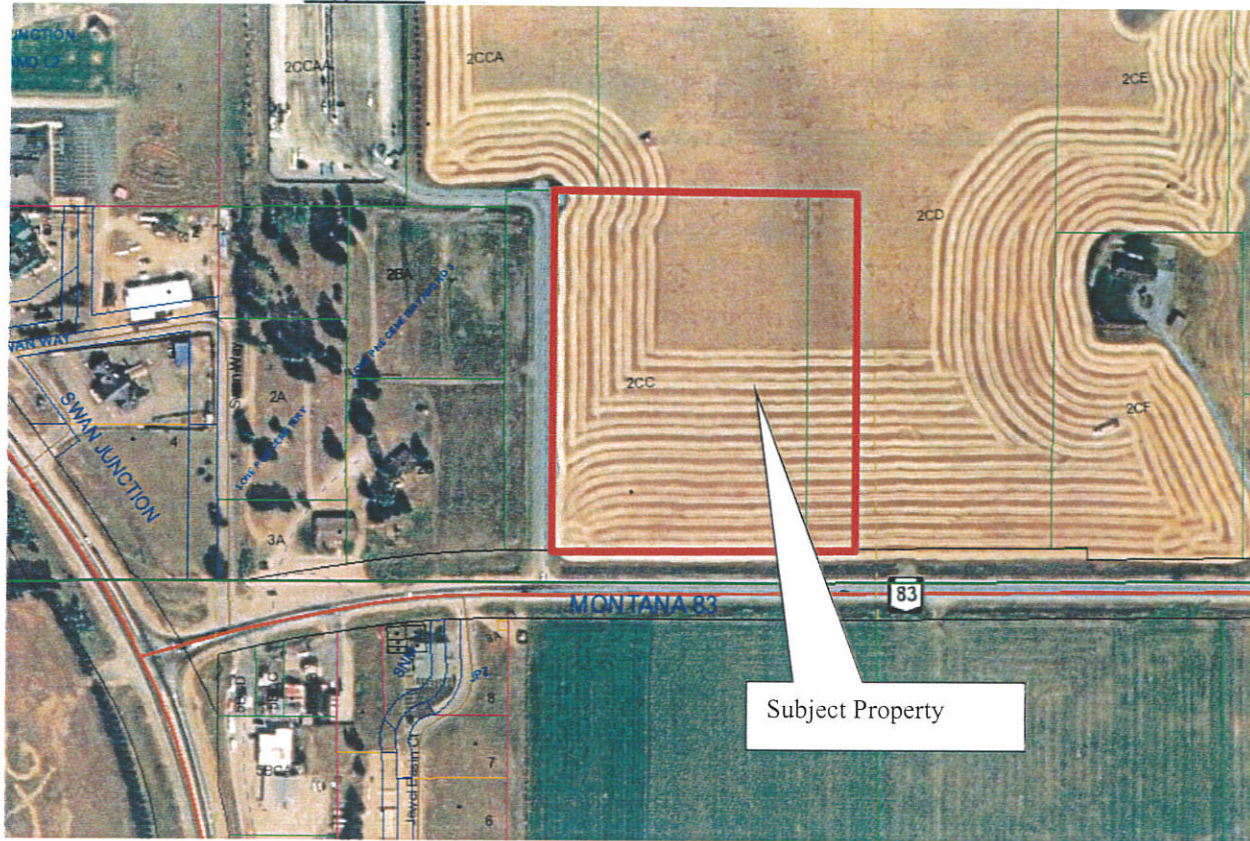
There will not be any cuts within the subdivision with depths greater than three feet.

d. Vegetation:

- i. On a sketch map or aerial photo indicate the distribution of the major vegetation types such as marsh, grassland, shrub, coniferous forest, deciduous forest, mixed forest, including critical plant communities such as stream bank or shore line vegetation; vegetation on steep, unstable slopes; vegetation on soils highly susceptible to wind or water erosion.

The property is unirrigated cropland. The property is in agriculture production. There are no trees on the property. (See Aerial Photo, Figure 2).

**Figure 2.**



Source: Google Earth

- ii. Identify locations of noxious weeds and identify the species of weeds and explain measures to control weed invasion.

The property is in productive agriculture and managed for weeds. In addition the public road to the west that is located on the applicants property is the access to the County Green Box site and this road easement is also sprayed for weeds. With the conversion of the property to a commercial/mixed use scale subdivision, what is not covered by roof and asphalt, will be seeded with grass and mowed on a regular basis. (See Appendix F – CC&R's Rules)

- iii. Describe any probable impacts and any protective measures to preserve trees and critical plant communities (e.g., design and location of roads, lots and open spaces).

According to a search by the Montana Natural Heritage Program, there are no critical plant communities on site or in vicinity of the subdivision. (See Appendix B – Montana Natural Heritage Program data)

- e. Wildlife:



To write this section of the EA, the wildlife maps prepared by Flathead County GIS with cooperation by Montana FW&P were consulted. The Montana Natural Heritage Program was consulted for Species of Concern data (Plant and animal). Jessy Coltrane, Wildlife Biologist, of Fish, Wildlife and Parks, was consulted for comment on the subdivision and potential impacts on January 27, 2020. Ms. Coltrane responded by email stating she had the area is used by bear and deer. The email is included in Appendix B.

- i. Describe species of fish and wildlife which use the area affected by the proposed subdivision.

Whitetail deer and birds of prey are known to visit the property. Other species of wildlife that use the site including: raccoon, coyote, other small mammals, and a diversity of passerine birds. The property is not grizzly bear or other large predator habitat. The Montana Heritage Program (MHP) provided a search of its records of Species of Concern (SOC) for a nine-plus square mile area around the proposed subdivision site. According to the Montana Heritage Program, there are fourteen species of concern sighted in broad search location. The species listed are the Great Blue Heron, Bull Trout, Westslope Cutthroat Trout, Pygmy Whitefish, Evening Grosbeak, Bald Eagle, Pileated Woodpecker, Little Brown Myotis (Bat), Cassin's Finch, Brown Creeper, Grizzly Bear, Straightbeak Buttercup (plant), Giant Hellebrone (plant) and Panic Grass (plant). The Great Blue Heron have been documented near the subdivision in farm field which offer some foraging area but not ideal habitat. The Flathead River is approximately one and a half miles to the west Johnson Lake is approximately 0.6 miles to the east. The Flathead River provides the habitat for the fish species and this subdivision has no direct drainage or impact to the river. The River and the nearby pothole lakes provide habitat and food for the bald eagles and the Heron. The Little Brown Myotis are located in the forested and rock bluffs areas along the River. The subdivision has neither river frontage or rock outcroppings. The Grosebeak, woodpecker, finch and creeper all like forested areas of which there are none on the subject property. The Grizzly Bear may wander along the riparian areas of the River and in the foothills of Swans but there are no food or habitat resources on the subject property that would attract the Grizzly bear unless you count the neighboring Green Box site. The buttercup, Helleborine and panic grass like, wet or moist soils more associated with the Flathead River corridor to the wets or the pothole lakes to the east. The proposed subdivision will not impact either of these habitats. (The full MHP response is included as Appendix B)

- ii. Identify on the preliminary plat any known critical or "key" wildlife areas, such as big game winter range, waterfowl nesting areas, habitat for rare or endangered species, or wetlands.

The subject property is level and void of any type of water way. There is not one single tree on the property. There are no “key” wildlife habitats for rare, endangered or just plain wildlife species. As this proposed subdivision is adjacent an urbanized area, with adjacent and nearby commercial and residential uses, it would not appear that this area is key wildlife habitat.

- iii. Identify rare and endangered species on-site. Describe the impacts and measures to mitigate the impact(s), or submit a statement explaining why no impact is anticipated, providing documentation to support that statement.

The Montana Heritage Program (MHP) provided a search of its records of Species of Concern (SOC) for a nine-plus square mile area around the proposed subdivision site. According to the Montana Heritage Program, there are fourteen species of concern sighted in broad search location. The species listed are the Great Blue Heron, Bull Trout, Westslope Cutthroat Trout, Pygmy Whitefish, Evening Grosbeak, Bald Eagle, Pileated Woodpecker, Little Brown Myotis (Bat), Cassin’s Finch, Brown Creeper, Grizzly Bear, Straightbeak Buttercup (plant), Giant Hellebrone (plant) and Panic Grass (plant). The Great Blue Heron have been documented near the subdivision in farm field which offer some foraging area but not ideal habitat. The Flathead River is approximately one and a half miles to the west Johnson Lake is approximately 0.6 miles to the east. The Flathead River provides the habitat for the fish species and this subdivision has no direct drainage or impact to the river. The River and the nearby pothole lakes provide habitat and food for the bald eagles and the Heron. The Little Brown Myotis are located in the forested and rock bluffs areas along the River. The subdivision has neither river frontage or rock outcroppings. The Grosebeak, woodpecker, finch and creeper all like forested areas of which there are none on the subject property. The Grizzly Bear may wander along the riparian areas of the River and in the foothills of Swans but there are no food or habitat resources on the subject property that would attract the Grizzly. The buttercup, Helleborine and panic grass like, wet or moist soils more associated with the Flathead River corridor to the wets or the pothole lakes to the east. The proposed subdivision will not impact either of these habitats. (The full MHP response is included as Appendix B))

- iv. Describe any probable impacts and proposed measures to protect or enhance wildlife habitat or to minimize degradation (i.e., keeping building and roads back from shorelines; setting aside marshland as undeveloped open space).

There are no sensitive habitats to protect within the subdivision. The property is a wheat field. Any habitat that may have existed on this property predates memory.

- v. It is recommended that the subdivider discuss the impact of the proposed development on fish and wildlife with the Department of Fish, Wildlife and Parks (FWP) and incorporate any recommendations from the agency to mitigate wildlife impacts.

A copy of the The Fort preliminary plat and short explanation was emailed to Fish, Wildlife, and Parks for comment on January 24, 2020. Ms. Jessy Coltrane, Wildlife Biologist; Fish, Wildlife and Parks; Region 1, responded in an email stating the area is used by bears and deer. And there may be cumulative impacts on these species with the proposed development. A copy of the FWP email is included in Appendix B.

f. Wildlife Habitat

- i. Proposed subdivisions that are contiguous to urbanized areas are presumed to have minimal impacts of wildlife habitat.

The proposed subdivision is adjacent to the urban confines of Bigfork. As such it should have little or no impact on wildlife habitat.

- ii. Proposed subdivision in locations with riparian areas, wetlands, rivers, streams, lakes, or other natural surface waters are presumed to have an impact on wildlife habitat. Describe the impact(s) and measures to mitigate the impact(s), or submit a statement explaining why no impact is anticipated, providing documentation to support that statement.

There are none of the sensitive habitats listed above, on or near the proposed subdivision. The subdivision is one and a half miles from the Flathead River and nearest pothole lake is almost a half mile from the site. Because of the urban nature of the existing neighborhood and the distance to any surface water, no impacts are presumed and no mitigation measures are required.

- iii. Proposed subdivisions in an area with rare or endangered species, as identified by state or federal agencies, are presumed to have an impact on the habitat of these species. Describe the impacts(s) and measures to mitigate the impact(s), or submit a statement explaining why no impact is anticipated, providing documentation to support that statement.

The Montana Heritage Program (MHP) provided a search of its records of Species of Concern (SOC) for a nine-plus square mile area around the proposed subdivision site. According to the Montana Heritage Program,



there are fourteen species of concern sighted in broad search location. The species listed are the Great Blue Heron, Bull Trout, Westslope Cutthroat Trout, Pygmy Whitefish, Evening Grosbeak, Bald Eagle, Pileated Woodpecker, Little Brown Myotis (Bat), Cassin's Finch, Brown Creeper, Grizzly Bear, Straightbeak Buttercup (plant), Giant Hellebrone (plant) and Panic Grass (plant). The Great Blue Heron have been documented near the subdivision in farm field which offer some foraging area but not ideal habitat. The Flathead River is approximately one and a half miles to the west Johnson Lake is approximately 0.6 miles to the east. The Flathead River provides the habitat for the fish species and this subdivision has no direct drainage or impact to the river. The River and the nearby pothole lakes provide habitat and food for the bald eagles and the Heron. The Little Brown Myotis are located in the forested and rock bluffs areas along the River. The subdivision has neither river frontage or rock outcroppings. The Grosebeak, woodpecker, finch and creeper all like forested areas of which there are none on the subject property. The Grizzly Bear may wander along the riparian areas of the River and in the foothills of Swans but there are no food or habitat resources on the subject property that would attract the Grizzly. The buttercup, Helleborine and panic grass like, wet or moist soils more associated with the Flathead River corridor to the wets or the pothole lakes to the east. The proposed subdivision will not impact either of these habitats. (The full MHP response is included as Appendix B)

- iv. Proposed subdivisions on or adjacent to land identified by state or federal agencies as critical habitat are presumed to have an impact on wildlife habitat. Describe the impact(s) and measures to mitigate the impacts(s), or submit a statement explaining why no impact is anticipated, providing documentation to support that statement.

There does not appear to be any critical habitats (Federal, State, or Local) on or adjacent to the proposed subdivision.

g. Agriculture and Timber Production:

- i. On a sketch map locate the acreage, type and agricultural classifications of soils.

The property is mapped by the 1960 Upper Flathead Valley Soils Survey and it identifies three soil types: Blanchard loamy fine sand, 3 to 7% slope percent slopes (Bo) a Class IVes-1 soil; Flathead Fine sandy loam, 3 to 7% (Fb) a Class Iles-1 soil and Haskill fine sand, 7 to 12% (Hm) a Class VIes-1 soil. According to the 1960 Soils Survey, the Flathead (Fb) contains about 96% of the site. The soils survey also indicates that the (Fb) soil produces about average yields for wheat, oats, and alfalfa. (Source: 1960 Upper Flathead Valley Area Soils Survey)

The attached USDA Natural Resources Conservation Service, Web Soil Survey information is intended primarily for agricultural production (Figure 3).


**Figure 3.**



Source: USDA Natural Resources Conservation Service, Web Soil Survey and Soils Survey Upper Flathead Valley Area Montana, Issued September 1960.



**Upper Flathead Valley Area, Montana (MT617)**

Upper Flathead Valley Area, Montana (MT617) 

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
Bo	Blanchard loamy fine sand, 3 to 7 percent slopes	0.2	1.3%
Fb	Flathead fine sandy loam, 3 to 7 percent slopes	15.6	96.1%
Hm	Haskill fine sand, 7 to 12 percent slopes	0.4	2.6%
<b>Totals for Area of Interest</b>		<b>16.2</b>	<b>100.0%</b>

- ii. Identify and explain the history of any agricultural production of the by crop type and yield.

The property is a wheat field and has been in agricultural production of one crop or the other for many years. The property provides average yields..

- iii. Describe the historical and current agricultural uses which occur adjacent to the proposed subdivision and explain any probable impacts and measures which will be taken to avoid or limit development conflicts with adjacent agricultural uses.

The property is and has been used for agricultural practices. However adjacent uses are beginning to convert to housing, commercial, and light industrial. The proposed mixed use development should have minor impacts on neighboring agricultural uses. For example Highway 83 separates the subdivision from the livestock pastures to the south. With the grain crops to the north, a condition could be placed on the proposed subdivision stating that the neighboring agricultural uses predate the development and dust and noise may be a by-product of the agricultural activity during certain times of the year.

- v. If timbered, identify and describe any timber management recommendations



which may have been suggested or implemented by a professional forester.

The site is not timbered (Figure 2).

h. Agricultural Water User Facilities:

- i. On a sketch map or aerial photo, locate any agricultural water user facility, including but not limited to agricultural water works, wells, canals, irrigation ditches, and pump houses on-site or adjacent to the proposed subdivision.

There are no shared agricultural water works, canals, irrigation ditches, pump houses etc. The property is not located within an agricultural water district.

- ii. Describe any agricultural water user facility on the site or in proximity that might be affected and explain any probable impacts(s) and measures which will be taken to avoid or mitigate probable impacts.

There are no shared agricultural water works, canals, irrigation ditches, pump houses etc., that will be affected by the proposed subdivision.

- iii. It is recommended that the subdivider discuss any impact of the proposed development on agricultural water user's facilities with irrigation and company or organization controlling the facility and incorporate any recommendations from the agency to mitigate water user impacts

The property is not in an agricultural irrigation district or are there any agricultural irrigation districts or companies in proximity of the subdivision.

i. Historical Features:

- i. Describe and locate on a plat overlay or sketch map any known or possible historic, paleontological, archeological or cultural sites, structures, or objects which may be affected by the proposed subdivision.

The subject property is void of any structures. The property has only been used for pasture. SHPO was contacted for comment on the subdivision. SHPO has no record of any historical or culturally significant use on the subject property

- ii. Describe any plans to protect such sites or properties.

There are no historic or culturally significant sites or structures on the property.

- iii. Describe the impact of the proposed subdivision on any historic features, and the need for inventory, study and/or preservation and consultation with the State Historic Preservation Office (SHPO).

The State Historic Preservation Office (SHPO) was contacted regarding any cultural or historic features. SHPO responded (Project # 2020012901, Appendix C) stating that a search of their records did not show any Historic, Archaeological or Cultural sites located on the property. SHPO did not recommend that the developer conduct a cultural study of the property.

j. Visual Impact:

- i. Describe any efforts to visually blend development activities with the existing environment.

The proposed subdivision is located on 10 acres with frontage on Highway 83. The applicant proposes a commercial/mixed use subdivision on the subject property. The property is located just east of the Little Brown Church and is adjacent to the Bigfork Green Bix site and well as mini-storage, a County Park, commercial uses and multi-family uses in the Jewel Basin Plaza subdivision. (See Photos)

Photo 1

Looking south to  
the access with  
Highway 83



Photo 1





Photo 2

k. Air Quality:

- i. Describe any anticipated impact to air quality caused from dust or other air pollutants, including dust created by roads, and any means to mitigate the impact to air quality.

All subdivision roads within the project will be constructed and paved to County Standards. The access to the Green Box site is paved. All of the roads within the development will be privately owned and maintained. Watering of disturbed areas and tracking pads will be incorporated into the construction contract to lessen the potential of fugitive dust during construction of the subdivision. (See Dust Control Plan, Appendix D)

l. Area Hazards

- i. Describe and locate on a plat overlay or sketch map any hazardous concerns or circumstances associated with the proposed subdivision site, including, but not limited to:
  - A. Any part of the proposed subdivision that is located within the Wildland Urban Interface priority area. If located in the Wildland Urban Interface or high fire hazard area identified by a local fire district or fire protection authority described probable impact(s) and measures to mitigate the impacts(s), or submit a statement why



no impact is anticipated, providing documentation to support the statement.

The property is not located within the Wildland Urban Interface or a Fire District priority area. (Flathead County GIS).

- B. Any potential hazardous materials contained on site, including high pressure gas lines, high voltage transmission lines, super fund sites, abandoned landfills, mines or sewer treatment plants, etc. In some cases an “Environmental Site Assessment” may be required.

There does not appear to be any of the hazards listed above located on the subject property..

- C. Describe measures to mitigate any adverse impacts associated with area hazards.

As there are no identified hazards, no mitigation measures are proposed.

**Part 2 - Community Impact Report (This portion of the Report was prepared in part with information provided by Jeff Larsen, PE of Larsen Engineering and Surveying – See Appendix A for complete water, wastewater, and stormwater report)**

a. Water Supply:

- i. Describe the proposed water system and how water will be provided for household use and fire protection and the number of gallons needed to meet the needs of the anticipated final population.

Water supply to the new development will be provided by Bigfork Water and Sewer District (Bigfork). The property is presently situated within the boundaries of the Bigfork Water & Sewer District. There is an existing water main located on the south side of Montana Hwy. 83. Connection to the main south of Hwy. 83 will require boring a new main under Hwy. 83.

New 8-inch diameter or larger water mains will be connected to, extended into and through the project site to provide a looped water distribution network. The distribution network will supply fire hydrants located at strategic points determined by the Bigfork Fire Department and also feed individual service connections and domestic water meters to each lot.

The applicant plans construction of a Pickleball and event center with parking on Lot 2. The event center can be used for events of up to 500 people and there will only be one manager. It is estimated that the event

center could generate around 2,513 gallons per day (GPD) of domestic flow with a 500 person event. The other 13 lots do not have definite plans for development. Based on the types of uses allowed in the zoning, it is estimated that an acceptable flow for the other 13 lots would be around 750 GPD/lot. Therefore the total domestic flow would be ((13 x 750 GPD) + (2,513 GPD))/14 = 876 GPD x 14 lots = 12,264 GPD. Summertime average usage, will require irrigation. Irrigated area is estimated to be as follows: 18,800 square feet (sf) for Lot 1; 20,000 sf for Lot 2; 7,500 sf for Lots 3-6; 5,900 sf for Lots 7-10; 13,000 sf for Lots 11-13; and 10,500 sf for Lot 14. Assuming 2" of irrigation per week requires a total of 25,272 GPD during the summer months. Therefore the total required domestic and irrigation demand during the summer months is 12,264 GPD (domestic) + 25,272 GPD (irrigation) = 37,536 GPD

- ii. Indicate whether the plans for water supply meets state standards for quality, quantity and construction criteria.

The Bigfork Water System is a public water system regulated by the Montana Department of Environmental Quality. The District monitors the quality of its water regularly. Water delivered to the customers of the Bigfork water system meets the water quality standards of MT DEQ in all respects. The Bigfork water distribution system is a looped network of pipes ranging in size. Connection to the Bigfork system will be made by connecting to an existing water main south of Hwy. 83. The existing water mains of the Bigfork system were constructed in accordance with DEQ requirements to provide minimum flow requirements for domestic and fire flows. Minimum allowable pressure with full domestic flow is 35 psi and minimum pressure with full fire flow is 20 psi. Fire flow requirements for the subdivision will be determined with consultation with the Bigfork Fire Dept. The new water system for this application is a series of looped water mains that will be designed to meet minimum pressure requirements for both fire and domestic flow.

The new water system will be designed and installed in conformance with Bigfork Water & Sewer District design standards and MT DEQ Circular 1 for Public Water Systems, and Montana Public Works Standards Specifications. Construction criteria are public works grade, equal in quality to the rest of the Bigfork water distribution system.

Plans showing the preliminary layout of the water supply and distribution network to serve the proposed development are shown on the DEQ layout sheets attached to the subdivision application.

- iii. If the subdivider proposes to connect to an existing water system:

The applicant will connect to the Bigfork Water System.

- A. Identify and describe that system.

Water supply to the new development will be provided by the Bigfork Water and Sewer District

- B. Provide written evidence that permission to connect to that system has been obtained.

See attached letter from the Bigfork Water and Sewer District (Appendix A).

- C. State the approximate distance to the nearest main or connection point.

There is an existing water main located south of Hwy. 83, which is less than 200 feet south of the south boundary of the subdivision.

- D. State the cost of extending or improving the existing water to service the proposed development.

The developer will cover the costs to extend Bigfork water into the subdivision.

- E. Show that the existing water system is adequate to serve the proposed subdivision.

See letter from the Bigfork Water and Sewer District. (Appendix A)

- iv. If a public water system is to be installed, discuss:

- A. Who is to install that system and when it will be completed?

The developer of Tim Calaway will be responsible for hiring a qualified contractor to install the water system. Installation of the water system can begin only after completion of the final system design, and review and approval by both Bigfork Water & Sewer District and Montana DEQ. Construction could begin in the spring of 2020.

- B. Who will administer and maintain the system at the beginning of subdivision development and when subdivision is completed.

The water system will be installed in conformance with the approved plans by a contractor hired by the developer of The Fort.



Construction observation will be performed by Larsen Engineering & Surveying, Inc. during installation of the water system. Upon successful completion of the construction, Larsen Engineering & Surveying, Inc. will report to both Bigfork Water & Sewer System and MT DEQ that construction was completed according to the approved plans. The domestic water meters supplying the water services and fire hydrants will be accepted by the Bigfork Water and Sewer District, who will operate and maintain these components.

- C. Provision of evidence that the water supply is adequate in, quality, and dependability (75-6-102 MCA).

The water supply and distribution system of the Bigfork County Water and Sewer is a public water as defined by 75-6-102 (14) MCA. The water supply system is registered with MT DEQ as PWSID MT00262. The drinking water comes from three 300 deep wells. At the end of 2017, the district had 1434 residential and commercial service connections. The Bigfork water system is in good standing with MT DEQ in all respects, including both water quality and the dependability with which it serves water to its customers. The District water supply dependability is excellent..

- v. If individual water systems are to be provided, describe the adequacy of supply of the ground water for individual wells or cisterns and how this was determined.

N/A.

b. Sewage Disposal:

- i. Describe the proposed method of sewage disposal and system.

A network of gravity sewage collection and pressure force mains, will be installed to collect sewage from individual lots. E-one low pressure sewage pumps will be used on some of the lots to pump sewage into the gravity mains for The Fort. Sewage will be conveyed to an existing Bigfork Water & Sewer District sewer main. Wastewater from the Bigfork system is pumped by a series of lift stations to the Bigfork Wastewater Treatment Facility for treatment and disposal.

- ii. Indicate the number of gallons of effluent per day which will be generated by the proposed subdivision at its full occupancy, whether the proposed method of sewage disposal is sufficient to meet the anticipated final needs of the subdivision and whether it meets state standards.

The applicant plans construction of a Pickleball and event center with parking on Lot 2. The event center can be used for events of up to 500

people and there will only be one manager. It is estimated that the event center could generate around 2,513 GPD of domestic flow with a 500 person event. The other 13 lots do not have definite plans for development. Based on the types of uses allowed in the zoning, it is estimated that an acceptable flow for the other 13 lots would be around 750 GPD/lot. Therefore the total domestic flow would be  $((13 \times 750 \text{ GPD}) + (2,513 \text{ GPD}))/14 = 876 \text{ GPD} \times 14 \text{ lots} = 12,264 \text{ GPD}$ . Based on the estimated 12,264 GPD for The Fort and a peaking factor of 4.5, the peak wastewater flow would be 38.3 gpm.

The proposed method of sewage treatment and disposal is by the Bigfork wastewater treatment plant (WTP). According to the Flathead County, DNRC Contract No. RRG-10-1440, SEWAGE TREATMENT IN THE FLATHEAD BASIN, for the Flathead Regional Wastewater Management Group (Ref. 1) a new wastewater treatment facility was constructed for the Bigfork Water and Sewer District in 2012. The system is a new Membrane Bioreactor (MBR) system with UV disinfection of the final effluent. According to Ref. 1, the MBR system was selected "...due to low effluent limits (especially for nutrients) anticipated in future permits, the fact that MBRs provide the most treatment capacity per unit area compared to other technologies, and the MBR option was the most cost effective solution for Bigfork." The new MBR facility has been designed to handle year 2030 projected annual average wastewater flow of 0.69 mgd with a maximum daily flow of 1.26 mgd and a peak hourly flow of 1.38 mgd.

- iii. If the development will be connected to an existing public sewer system, include:

The Fort will connect to the sewage collection system of the Bigfork Water and Sewer District.

- A. A description of that system and approximate distance from the nearest main or connection point to the proposed subdivision.

A network of gravity sewage collection and pressure force mains, will be installed to collect sewage from individual lots. E-one pumps will be used on some of the lots to pump sewage into the gravity mains for The Fort. Sewage will be conveyed to an existing Bigfork Water & Sewer District sewer main. The new sewer main network will be connected to an existing manhole in the southwest corner of the subdivision. The connection point is located at the southwest corner of The Fort..

- B. Written evidence that permission to connect to that system has been obtained.

Bigfork County Water & Sewer District has provided a letter stating that they can provide sewer service to the development provided that all pertinent standards of the District are met and all applicable fees are paid. The developer of The Fort will have design drawings meeting District standards prepared and submitted to the District and MT DEQ for review and approval. All fees will be paid to the appropriate agencies. (Appendix A)

- iv. If a new public sewage disposal system, as defined under 75-6-102 MCA, is to be installed, discuss:

The applicants are not proposing a new public system. The applicants will be connecting to an existing public sewer system

- A. When the system will be completed, and how it will be financed.

N/A.

- B. Who is to administer and maintain the proposed system at the beginning of subdivision development and when development is completed?

N/A.

c. Storm Water Drainage

- i. Describe the proposed methods of storm water drainage for roads and other anticipated impervious surfaces, including storm water calculations.

Runoff from the development will be contained, treated and disposed of on-site. Some off-site discharge is proposed. See Larsen Engineering and Surveying plan sheet for Preliminary Storm Drainage plans. Preliminary storm drain calculations are attached to this EA in Appendix A.

The storm drain system for The Fort consist of of two components as follows:

- The first component of the storm drain system is for the subdivision roadway system. The storm drain system will consist of roadside ditches along the subdivision roadways that will convey storm water to catch basins with 3,000 gallon septic tank catch basins. Storm water will be conveyed by piping from the catch basin tank to cobble rock infiltration/retention beds, wrapped in engineering fabric, located in the subdivision road right of way. The storm water infiltration/retention beds will be designed to handle the 100 year – 24



hour storm event based on Montana Department of Environmental Quality (DEQ), Circular DEQ-8 requirements.

- The second component of the storm drain system is for the individual lots located in the subdivision. The storm drain system for the individual lots will consist of storm drain infiltration/retention basins constructed in appropriate locations to handle the 100 year – 24 hour storm event based on Circular DEQ-8 requirements.

- ii. Describe the proposed methods of storm water drainage for other areas of the subdivision, including stormwater calculations.

The storm drain system for The Fort consist of two components as follows:

- The first component of the storm drain system is for the subdivision roadway system. The storm drain system will consist of roadside ditches along the subdivision roadways that will convey storm water to catch basins with 3,000 gallon septic tank catch basins. Storm water will be conveyed by piping from the catch basin tank to cobble rock infiltration/retention beds, wrapped in engineering fabric, located in the subdivision road right of way. The storm water infiltration/retention beds will be designed to handle the 100 year – 24 hour storm event based on Montana Department of Environmental Quality (DEQ), Circular DEQ-8 requirements.
- The second component of the storm drain system is for the individual lots located in the subdivision. The storm drain system for the individual lots will consists on storm drain infiltration/retention basins constructed in appropriate locations to handle the 100 year – 24 hour storm event based on Circular DEQ-8 requirements.

- iii. Identify the mechanism and who is responsible for maintenance of the storm water drainage system.

The future lot owners association of The Fort will be responsible for operating and maintaining all stormwater drainage ditches and culverts located within the road rights-of-way. Individual lot owners will be responsible for maintaining the storm drain system on their respective lot.

- d. Solid Waste Disposal:

- i. Describe the proposed system of solid waste collection and disposal for the subdivision including:

The subdivision will use a contract hauler for refuse collection and hauling. The landfill is located along U.S. Highway 93 about 20 miles northwest of the subject property.

- A. Evidence that existing systems for collection and facilities for disposal are available and can handle the anticipated additional volume.

The Flathead County Growth Policy (2012 Update) provides Solid Waste projection in Chapter 7. According to the Growth Policy, the landfill has a capacity for current and future needs of 29 years if the increase in waste stream grows at 8% annually and 57 years if the waste stream grows at 2%. Based on the estimated capacity remaining as of July 2008, combined with current and projected inflow as well as diversion rates, the Flathead County Landfill is anticipated to reach capacity by 2055. Expanded recycling programs could be instituted within the County to increase the life expectancy of the landfill. In 2011 the Landfill acquired additional property adjacent to the landfill and is looking to acquire more property to provide up to 100 years of life.

- B. A description of the proposed alternative where no existing system is available.

N/A

e. Roads

- i. Describe any proposed new public or private access roads or substantial improvements of existing public or private access roads.

The Fort subdivision will develop a road system to provide legal access to all lots. The internal looped road system will be designed and paved to Flathead County Road Standards throughout. The looped subdivision road has two approaches onto Highway 83.

- ii. Discuss whether any of the individual lots or tracts have access directly to arterial or collector roads; and if so, the reason access was not provided by means of a road within the subdivision.

All lots will have access to the local interior road system. Lots 1 and 11 will access the local road that also accesses the Green Box site and the mini storage development to the north. The Green box access is paved to County standards and provides local access to the subject site as well as some of the neighboring parcels.

- iii. Explain any proposed closure or modification of existing roads.

The proposed subdivision will not close any existing roads. There is the existing 60-foot public road easement running along the western property boundary of the proposed subdivision. Lots 1 and 11 will access this road and the interior subdivision roads will loop off of this road and back to Highway 83 on the east. The subdivision design accommodates the easement and will not hinder it in any way. Other than approaches and utility connections, the proposed subdivision will not alter the public access.

- iv. Identify existing primary road Average Vehicle Traffic and subdivision daily vehicle traffic assigned to that primary road.

Because of the commercial nature of the proposed subdivision the applicant engaged a Traffic Engineer, Abelin Traffic Services, to conduct a Traffic Impact Study for the subdivision. According to the TIS, in 2018, Highway 83 carried 5400 vehicle trips per day. In that same year 2018, last date of MDOT traffic counts, Highway 35 carried 8,600 vehicle trips per day. (See Appendix X for the TIS)

- v. Describe provisions considered for dust control on roads.

All roads within the development will be paved. The applicants submitted a dust abatement plan with the proposed subdivision application. (See Appendix D)

- vi. Indicate who will pay the cost of installing and maintaining dedicated and/or private roadways.

The owners/developers will be responsible for construction of the new road system within subdivision. The future Subdivision Owners Association will be responsible for long term maintenance of the interior subdivision roads

- vii. Discuss how much daily traffic will be generated on existing local and neighborhood roads and main arterial, when the subdivision is fully constructed.

The 14 lots within the subdivision could potentially generate 364 vehicle trips per day to the adjacent roadways which calculates to a 2 to 3% increase in vehicles. Of course the B-3 zoning designation has a very diverse land use list and the traffic generated could vary widely. We have to make some assumptions based on nearly uses which are primarily small office/service business or light industrial uses such as storage and contractor offices. The TIS shows that at buildout using these assumptions, the neighboring intersections will continue to function at A and B levels of Services at the Peak Hours. The TIS also indicated that



there may or may not be a warrant for a left hand turn lane into the green box site with the addition of this subdivision. As Highway 83 is a Montana Department of Transportation (MDOT) roadway, the MDOT will be the ones to review the TIS numbers and make any decision through their System Impacts analysis. As stated in the TIS there are factors such a speed limit signage and available right-of-way to considers in determining additional turn lanes. Appendix E

- viii. Indicate the capacity of existing and proposed roads to safely handle any increased traffic. Describe any anticipated increased maintenance that will be necessary due to increased traffic and who will pay the cost of maintenance.

The Green Box Access is a paved County maintained Roads. Highway 83 is paved and maintained by the Montana Department of Transportation. The commercial subdivision is not expected to overburden the neighboring County road. The proposed subdivision will pay county taxes some of which will be used for maintenance of the existing county road system. Roads within the development will be the responsibility of future Homeowners Association.

- ix. Explain whether year round access by conventional automobile will be available over legal rights of way to the subdivision and to all lots and common facilities within the subdivision.

The new roads within the subdivision will be privately maintained by The Fort Owners Homeowners Association. Maintenance includes annual duties such as snow removal as well as long term duties such as asphalt repair and overlays. Flathead County maintains and removes snow from Green Box access

f. Utilities:

- i. Include a description of:

- A. The method of furnishing electric, natural gas or telephone service, where provided.

Flathead Electric Co-op provides electrical power; CenturyLink provides telephone service; NorthWestern Energy provides natural gas and Spectrum provides cable TV/telephone/internet service.

- B. The extent to which these utilities will be placed underground.

All utilities are available and will be extended underground to the individual spaces/lots.

- C. Estimated completion of each utility installation.

If approved, the applicant expects to go to construction of the infrastructure during the 2020 construction season.

g. Emergency Services:

- i. Describe the emergency services available to the subdivision such as:

- A. Is the proposed subdivision in an urban or rural fire district? If not, will one be formed or extended? In absence of a fire district, what fire protection procedures are planned?

The proposed subdivision is within the Bigfork Volunteer Fire District. The fire Station is located on Highway 35 approximately two miles south the proposed subdivision. The subdivision access is designed to County Standards and the development will install fire hydrants throughout the project.

- B. Police protection.

The proposed subdivision will be served by the Flathead County Sheriff's Office. Chapter 7, Part 4, of the Flathead County Growth Policy, states that the Sheriff's Office has six divisions with 118 employees of which 48 are "on the ground" law enforcement officers responsible for the unincorporated portions of the County. The Sheriff's Office runs three shifts in a 24 hour period with 4 to 6 officers on duty each shift.

- C. Ambulance service/Medical services.

Ambulance service is provided by the Bigfork Volunteer Fire Department which has a station located two miles south of the subdivision on Highway 35. Evergreen provides ambulance service with EMT trained personnel and lifesaving equipment.

- D. Give the estimated response time of the above services.

According to Bigfork Volunteer Fire Department, the response times for fire or ambulance to the subject subdivision is approximately 10 minutes. The Sheriff's Office is located in Kalispell and response times will depend on whether or not there is a deputy in the area. .

- E. Can the needs of the proposed subdivision for each of the above services be met by present personnel and facilities?

Provided the subdivision is designed and built to the County Road Standard, fire and ambulance service can be provided to this subdivision with existing personnel. The Flathead County Sherriff's Office provides a standard comment that they can meet the demands of the future growth but response times vary or may be slow depending on where personal happen to be when the call comes in and how many officers are available at the given time.

h. Schools:

- i. Identify the School Districts and describe the available educational facilities which would service this subdivision.

The Fort subdivision lies within the Bigfork School District #38 for K – 12 Grades. The schools are located on Commerce Street approximately two miles south of the subdivision. The junior high is just a ½ mile from the proposed subdivision. Glacier High School is located approximately four miles away.

- ii. Estimate the number of school children that will be generated from the proposed subdivision.

As the property will be primarily commercial, there may be no or very few school aged children generated by the proposed subdivision.

- iii. The subdivider shall discuss the impact of the proposed development on the provision of educational services with the administrator(s) of the school system(s). The subdivider shall provide a written statement outlining whether the increased enrollment can be accommodated by the present personnel and facilities and by the existing school bus system, any recommendations of the administrator(s), and any mitigation planned to overcome any adverse impacts of the proposed development on the provision of educational services.

As there will be no or very few children generated by the proposed subdivision, we did not contact the School District for comment. Looking at the subdivision from a taxation standpoint, commercial activity generates substantially more tax revenue for the school district than residential development and as no children would likely be generated from this development, the impact should be viewed favorably for the School District.



i. Land Use:

- i. Describe comprehensive planning and/or land use regulations covering the proposed subdivision or adjacent land and if located near the jurisdictional area of an incorporated city or town, whether annexation is proposed.

The property is located within the boundary of the Bigfork Land Neighborhood Plan which was adopted by Flathead County in 2009. The Bigfork Area Land Use Map identifies the subject property as Commercial. The resulting zoning for the property is B-2 (General Business)

Figure 4



Bigfork Neighborhood Plan Map, Adopted by Flathead County in 2009

12.15.11.2020

- ii. Describe how the subdivision will affect access to any public lands. Where public lands are adjacent to or near the proposed development, describe present and anticipated uses for those lands; (e.g., grazing, logging, recreation, etc.).

The proposed subdivision is close to the County Green Box Site but Commercial/mixed use project should have little impact on the Green Box Site. There is a County Park approximately ¼ mile to the east. The proposed development does not share access with the park and therefore should not have any impact on the park.

- iii. Describe the effect of the subdivision on adjacent land use.

Neighboring uses are mixed with the Green Box site and mini-storage to the north. The applicant, Tim Calaway owns the land directly east of the subdivision which is currently in agricultural production. To the south are agricultural lands and the Jewel Basin Plaza Development with a mix of commercial and multi-family uses. To the west is the Little Brown Church and associated cemetery along with numerous commercial uses at the intersection of Highway 83 and 35. The proposed commercial/mixed use development should blend with the neighboring uses..

- iv. Describe any health or safety hazards on or near the subdivision, such as mining activity or potential subsidence, high pressure gas lines, dilapidated structures or high voltage power lines. Any such conditions should be accurately described and their origin and location identified. List any provisions that will be made to mitigate these hazards.

As stated previously in section Part 1(l)(i)(A-C) there are none of the listed hazards associated with the subject property.

j. Housing:

- i. Indicate the proposed use(s) and number of lots or spaces in each:
- A. For residential indicate the type of dwelling unit.

- B. For all other uses the type and intensity of use (e.g. industrial, commercial, etc.).

The development will be commercial/mixed use and will comply with the B-2 zoning designation applied to the property. There are 14 lots within the proposed subdivision.

k. Parks and Recreation Facilities:

- i. Describe park and recreation facilities to be provided within the proposed subdivision and other recreational facilities which will serve the subdivision.

As this is a commercial subdivision, parkland dedication is not required by state law or the Flathead County Subdivision Regulations. Should a residential component happen with the subdivision recreation feature would be reviewed at that time.

l. Public Health and Safety:

- i. Describe any probable impacts and any measures to mitigate the impacts, or submit a statement explaining why no impact is anticipated, providing documentation to support that statement that might affect public health and safety that aren't specifically addresses in other sub –sections of the environmental assessment.

Other than those mentioned in this EA, there are no other impacts and therefore mitigations that would impact the Public Health and Safety.



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## **EA APPENDICIES**

- A. Larsen Engineering and Surveying, Inc – Water, Wastewater, and Stormwater Report, Data, and Maps
- B. Jessy Coltrane, Wildlife Biologist, January 27, 2020 and Species of Concern Data, Montana Natural Heritage Program
- C. SHPO Letter, 1/29/20
- D. Dust Control Plan
- E. Abelin Traffic Services - TIS
- F. Draft CC&R's – The Fort

### **MAPS/PLANS**

Vicinity  
Floodplain (FIRM Panel 2305J)  
Preliminary Plat  
Water, Sewer, & Stormwater Maps